



**Steel & Basalt Products**  
**Steel Coils, Fiber, Wire & More**

**[www.armofib.com](http://www.armofib.com)**

**ARMOFIB® LTD specializes in steel fiber products.**

**We focus on trade of steel products in Europe and beyond, promoting the usage of basalt products in various industries, including construction, automotive and aerospace manufacturing.**

ARMOFIB® LTD is a Hungarian subsidiary of the international group. We are successfully cooperating with regional and international customers worldwide.

The geography of our international sales covers more than 15 countries in various regions, including Europe, Russia, Tunisia, Italy, Switzerland and Romania.

ARMOFIB® LTD is an established regional leading company manufacturing steel fiber products, currently an exclusive quality producer on the Hungarian market.

## PRODUCTION

We produce steel fibers for construction sectors for various applications, such as airports, highway paving, industrial floors, tunnel linings, hydropower & hydraulic structures, fiber-reinforced shotcrete, slope stabilization, security objects and more.

## TRADING

We specialize in the international trading of wide range of steel and basalt products, requested by construction, automotive, aero-space, energy and defense industries.

## PROJECT HANDLING

We address any special requests and particular demands specified by our clients.

Based on custom requirements we find the best approach and provide solutions with selected materials and design to be used in each project.

## LOGISTICS

Our strategically favorable location enables us to be flexible and expeditious. Within a short time frame we can deliver our products practically to any country in Central-European region.

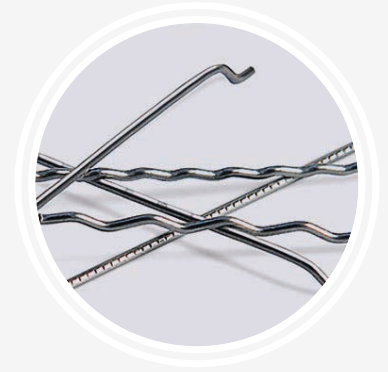


We produce high performance steel fibers for concrete reinforcement with over a decade of experience in production and worldwide distribution.



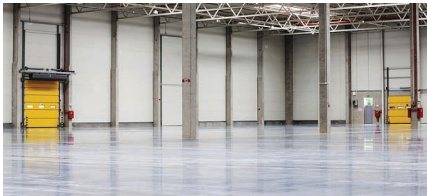
### Economic Advantages:

- Faster and cheaper construction (10 – 30 % less usually).
- Less thickness so less concrete
- No wire mesh installation so less people needed
- Faster concrete pouring with laser screed equipment
- More surface production in one day
- Possibility to reduce the numbers of saw-cuts
- Less maintenance costs, less cracks, less saw-cuts, better fatigue and impact resistance



## APPLICATION

### Floors



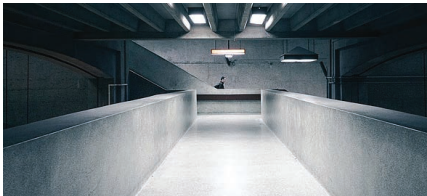
### Foundations



### Pavements



### Underground Structures



### Structural Applications



### Precast Elements



## SPECIFICATIONS

Steel fibers with hooked ends are manufactured according to the EN 14889/1-2007 standard.

ESSENTIAL CHARACTERISTICS	PERFORMANCE			HARMONIZED TECHNICAL SPECIFICATION
	NOMINAL	MINIMUM	MAXIMUM	
Tensile Strength (N/mm <sup>2</sup> )	1200	1020	1380	EN 14889/1-2007
Effect on workability of concrete	Consistency with 30,8 kg/m <sup>3</sup> ; VBE time: 7,9 s			
Effect on strength of concrete	Average residual strength of 3,0 N/mm <sup>2</sup> CMOD = 0,5 mm and of 2,4 N/mm <sup>2</sup> CMOD = 3,5 mm achieved with 30,8 kg/m <sup>3</sup> of steel fibers			

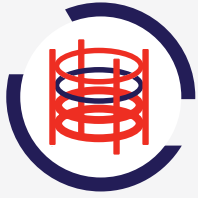
## PACKAGING

Steel fibers with hooked ends are packed in paper bags of 20 kg. Delivered on wooden pallets about 1 MT, protected by polyethylene shrink sideways and on the top, well tied with polypropylene strips.

Loaded manually or with use of the conveyor.

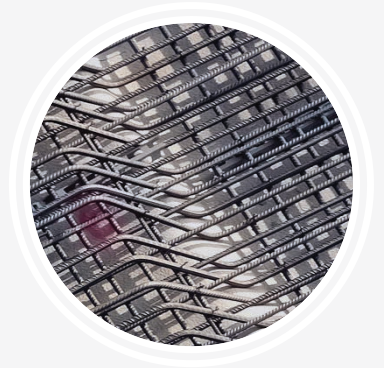
# Basalt Products & Fibers

We produce high performance steel fibers for concrete reinforcement with over a decade of experience in production and worldwide distribution.



## Economic Advantages:

- The economic effect of replacing steel rebar with basalt when properly redesigned is about 30%.
- Basalt rebar significantly extends the life of the structure, facilitates it, does not require welding, does not require the use of lifting equipment, and has a positive economic effect.
- You are saving on: materials, transportation, loading and unloading, welding services on the site, human resources



## OUR PRODUCTS

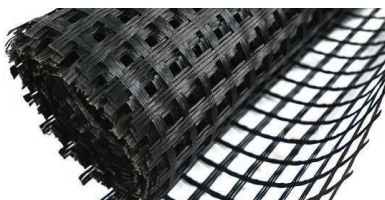
### Basalt Rebar



Bearing bar with continuous spiral ribbing formed by means of winding by basalt strip oiled in highly durable polymeric compound.

- Low specific weight: 4 times lighter than steel rebars
- Resistance to corrosion, rotting, and warping
- Unique chemical resistance
- Long life of constructions and products
- Good insulation

### Basalt Made Geogrid & Mesh



Geogrid is a reinforcement textile with various mesh sizes. It is a bi-axial mesh woven from multi-filament yarns. For the increased adhesion in concrete, Geogrids are impregnated with an alkaline-resistant coating. This results in the improvement of mechanical properties of concrete and alkaline resistance of Geogrid.

- Stronger than steel wire
- Lighter and easier to handle

### Basalt Fiber



Unlike metal grid, provides reinforcement in all directions has high adhesion characteristics and creates a uniform mass with concrete.

- Provision of three-dimensional reinforcement
- Lightness, high mechanical strength, corrosion and chemical resistance to tough environments
- High friction, frost, heat, and moisture resistance
- Sound absorption

### Basalt Fabrics



Basalt fabrics is an excellent technical solution when mechanical, thermal or other properties are needed and they are actually cheaper than carbon or special glass fabrics. Basalt fabrics used for high-performance applications from construction to clothing industries.

Basalt fabrics manufactured to varying thickness, weight, weave pattern and technique.

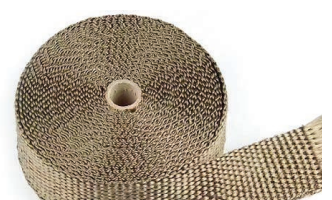
### Basalt Roving



By its technical characteristics, Basalt roving surpasses S-glass and E-glass by many parameters, and is almost as good as carbon.

- Lightness, high mechanical strength, corrosion and chemical resistance
- High frost resistance, heat resistance, moisture resistance
- Ability to filtrate substances
- Dielectric character
- Roving is extremely hard (8-9 Mohs)

### Basalt Products



Use Basalt Continuous Fibers for products requiring high temperatures, chemical resistance, long life, mechanical strengths and low water absorption properties.

By its technical characteristics, basalt roving surpasses S-glass and E-glass by many parameters, and is almost as good as carbon fibers.

We offer various types and sizes of steel coils suitable for all kinds of applications, cold-rolled, hot dip galvanized, hot rolled, pre-painted and much more.



- High quality steel steel coils.
- Regular and non-regular thickness and width size.
- No quantitative restriction per size.
- Easy logistics and delivery.



## Cold-rolled Steel Coils



Cold rolled coils made of low carbon non- alloyed structural steels are used for production of flat or cold -formed structural elements. Their application is determined by the minimum value of the yield point, or by the tensile strength.

Cold rolled coils made of fine-grained, atmospheric corrosion resistant structural steel are mostly used in the building industry and for various constructions. Improved resistance is due to the surface layer of oxides of alloying elements.

**Range of thickness:** 0,35 mm Min — 3 mm Max  
**Quality reference standards:** 600 Min — 2000 Max

EN 10130	EN 10209	EN 10268	EN 10139					
DC01	DC01EK	HC260LA	DP600	DC01	DC03	DC04	DC05	DC06
DC03	DC04EK	HC300LA	—	A	A	A	LC	LC
				LC	LC	LC		
DC04	DC06EK	HC340LA	—	C290	C290	C290	—	—
DC05	DC03ED	HC380LA	—	C340	C340	C340	—	—
DC06	DC04ED	HC420LA	—	C390	C390	C390	—	—
DC07	DC06ED	—	—	C440	C440	C440	—	—
—	—	—	—	C590	C590	C590	—	—
—	—	—	—	C690	—	—	—	—

## Hot-rolled Steel Coils



Hot rolled structural grades are suitable for construction applications, e.g. bent sections, welded tubular constructions, machine components, for parts of thermal and power equipment, etc.

These steels are well weldable.

**Range of thickness:** 1,8 mm Min — 20 mm Max  
**Quality reference standards:** 600 Min — 2000 Max

EN 10111	RM (MAX)	CHEMICAL ANALYSES (MAX %)			
		C	MN	P	S
DD11	440	0,12	0,60	0,045	0,045
DD12	420	0,10	0,45	0,035	0,035
DD13	400	0,08	0,40	0,030	0,030
DD14	380	0,08	0,35	0,025	0,025



## Hot Dipped Galvanized Coils

Hot dip galvanized coils made of drawing grades are suitable for cold forming and deep-drawing.

The coils are used for production of automotive parts, in building industry and for production of profiles, corrugated sheets, roof coverings and engineering.

**Range of thickness:** 0,4 mm Min — 4 mm Max  
**Quality reference standards:** 600 Min — 1800 Max

EN 10346	EN 10346	EN 10346
DX51D	S220GD	HX260LAD
DX52D	S250GD	HX300LAD
DX53D	S280GD	HX3400LAD
DX54D	S320GD	HX380LAD
DX56D	S350GD	HX420LAD
DX57D	S550GD	HX460LAD
—	—	HX500LAD

## Pre-painted Steel Coils



Steel coils with organic coating are suitable for all kinds of applications where corrosion resistance is especially important.

The material is mostly used in building industry for production of roof coverings and decorative appearance, siding panels and architectural elements. The material is also extensively applied in the appliance industry and for production of steel furniture.

**Range of thickness:** 0,35 mm Min — 1,5 mm Max  
**Quality reference standards:** 600 Min — 1500 Max

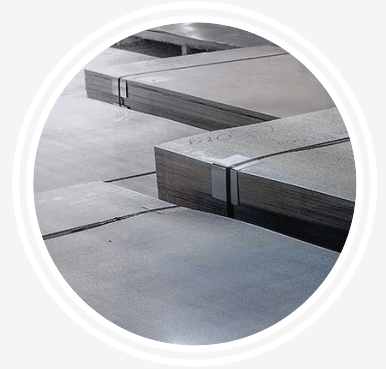
QUALITY	EN 10169
Surface Coating Color	RAL Colors
Back Side Coating Color	Light Grey
Type of Substrate	Hot Dipped Galvanized
Coil Weight	2,5-10 Tons
Painting	Top: 15 to 25 um (5 um + 12-20 um) Back: 7 +/- 2 um
Steel Color Painting Types	Polyester, PVDF, Special Coatings
Surface Treatments	Protective Filmed or Plain



ARMOFIB® LTD provides a range of services, including: sheet cutting of hot rolled, hot rolled pickled and cold rolled and coated coils. All dimensions will be adjusted to the customer needs with tolerances according to European standards.



- High quality steel sheets cut to length from coils.
- Regular and non-regular sizes according to the client's request.
- No quantitative restriction per size.
- Easy logistics and delivery.



## Cold-rolled Steel Sheets



Range of thickness: 0,35 mm Min — 4 mm Max  
 Range of widths: 600 mm Min — 2000 mm Max  
 Range of lengths: 600 mm Min — As You Request

GRADE	APPLICATION
EN 10130 "DC"	Cold rolled steel sheets made of low carbon non-alloyed steel, it's a drawing grades, suitable for non-structural pressworks, bending and cold flanging (cold forming processes), for products with varnished or metal costing and for enameling.
EN 10209 "DCxxEK"	Cold rolled sheets made of specially killed steel are suitable for deep drawing for conventional enameling.
EN10268 "HCxxxLA"	Cold rolled steel sheets made of structural fine-grained micro-alloyed steels are for drawn parts. The sheets are characterized with improved cold formability.

EN 10130	EN 10209	EN 10268	EN 10139
DC01	DC01EK	HC260LA	DP600
DC03	DC04EK	HC300LA	—
DC04	DC06EK	HC340LA	—
DC05	DC03ED	HC380LA	—
DC06	DC04ED	HC420LA	—
DC07	DC06ED	—	—





## Hot-rolled Steel Sheets

Low carbon steel sheets are suitable for deep drawing and cold forming. The sheets are weldable, higher grades are suitable for surface treatment by hot dipping, enameling or other coating methods.

**Range of thickness:** 1,8 mm Min — 12 mm Max  
**Range of widths:** 600 mm Min — 1500 mm Max  
**Range of lengths:** 600 mm Min — As You Request

EN 10111	APPLICATION
DD11	Steel is suitable for non-structural presswork, forming.
DD12	Steel is suitable for medium structural presswork.
DD13	Steel is suitable for presswork and surface treatment.
DD14	Steel suitable for structural presswork, surface treatment.



## Hot Dipped Galvanized Sheets

**Range of thickness:** 0,40 mm Min — 4 mm Max  
**Range of widths:** 600 mm Min — 1500 mm Max  
**Range of lengths:** 600 mm Min — As You Request

GRADE	APPLICATION
EN 10346 "DX"	Hot dip galvanized sheets made of drawing grades are suitable for cold forming and deep-drawing. The sheet are used for production of automobile parts, in building industry and for production of profiles, corrugated sheets, roof coverings and engineering.
EN 10346 "SxxxGD"	Structural grade sheets are used wherever strength parameters are prescribed, for supporting parts of building elements, bend profiles, etc.
EN 10346 "HXxxxLAD"	Cold rolled steel sheets made of structural fine-grained micro-alloyed steels are for drawn parts. The sheets are characterized with improved cold formability.

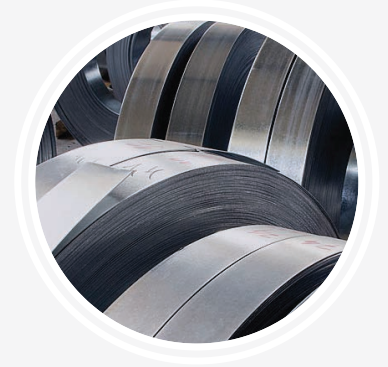
EN 10346	EN 10346	EN 10346
DX51D+Z	S220GD+Z	HX260LAD+Z
DX52D+Z	S250GD+Z	HX300LAD+Z
DX53D+Z	S280GD+Z	HX3400LAD+Z
DX54D+Z	S320GD+Z	HX380LAD+Z
DX56D+Z	S350GD+Z	HX420LAD+Z
DX57D+Z	—	—



We offer high quality steel strips, providing adjustments to customer's requests: slitting of hot rolled, hot rolled pickled, cold rolled and coated coils.



- High quality steel strips products.
- Regular and non-regular sizes according to the client's request.
- No quantitative restriction per size.
- Easy logistics and delivery.
- European standards are ensured



## Cold-rolled Steel

Range of thickness: 0,35 mm Min — 4 mm Max  
 Range of widths: 20 mm Min — 1500 mm Max

GRADE	APPLICATION
EN 10130 "DC"	Cold rolled steel strips made of low carbon non-alloyed steel, it's a drawing grades, suitable for non-structural pressworks, bending and cold flanging (cold forming processes), for products with varnished or metal costing and for enameling.
EN 10209 "DCxxEK"	Cold rolled strips made of specially killed steel are suitable for deep drawing for conventional enameling.
EN 10268 "HCxxxLA"	Cold rolled steel strips made of structural fine-grained micro-alloyed steels are for drawn parts. The sheets are characterized with improved cold formability.

EN 10130	EN 10209	EN 10268
DC01	DC01EK	HC260LA
DC03	DC04EK	HC300LA
DC04	DC06EK	HC340LA
DC05	DC03ED	HC380LA
DC06	DC04ED	HC420LA
DC07	DC06ED	—



## Hot-rolled Steel

Range of thickness: 1,80 mm Min — 12 mm Max  
 Range of widths: 20 mm Min — 1500 mm Max

EN 10111	APPLICATION
DD11	Steel is suitable for non-structural presswork, forming.
DD12	Steel is suitable for medium structural presswork.
DD13	Steel is suitable for presswork and surface treatment.
DD14	Steel suitable for structural presswork, surface treatment.



## Hot Dipped Galvanized

Range of thickness: 0,4mm Min — 4 mm Max  
 Range of widths: 20 mm Min — 1500 mm Max

GRADE	APPLICATION
EN 10346 "DX"	Hot dip galvanized strips made of drawing grades are suitable for cold forming and deep-drawing. The strips are used for production of automobile parts, in building industry and for production of profiles, corrugated sheets, roof coverings and engineering.
EN 10346 "SxxxGD"	Structural grade strips are used wherever strength parameters are prescribed, for supporting parts of building elements, bend profiles, etc.
EN 10346 "HXxxxLAD"	Cold rolled steel strips made of structural fine-grained micro-alloyed steels are for drawn parts. The sheets are characterized with improved cold formability.

EN 10346	EN 10346	EN 10346
DX51D+Z	S220GD+Z	HX260LAD+Z
DX52D+Z	S250GD+Z	HX300LAD+Z
DX53D+Z	S280GD+Z	HX3400LAD+Z
DX54D+Z	S320GD+Z	HX380LAD+Z
DX56D+Z	S350GD+Z	HX420LAD+Z
DX57D+Z	—	—



## Pre-painted Steel

Range of thickness: 0,35 mm Min — 1,50 mm Max  
 Range of widths: 20 mm Min — 1500 mm Max

QUALITY	EN 10169
Surface Coating Color	RAL Colors
Back Side Coating Color	Light Grey
Type of Substrate	Hot Dipped Galvanized
Coil Weight	2,5 - 10 Tons
Painting	Top: 15 to 25 um (5 um + 12-20 um) Back: 7 +/- 2 um
Steel Color Painting Types	Polyester, PVDF, Special Coatings
Surface Treatments	Protective Filmed or Plain

Steel wire is used for a wide range of applications such as wire for tires, hoses, galvanized wire and strands, ACSR strands and armoring of conductor cables, springs, fasteners, clips, staples, mesh, fencing, screws, nails, barbed wire, chains etc.



- High quality steel wire products.
- Coils & rosette sizes according to the client's request.
- No quantitative restriction per size.
- Easy logistics and delivery.



## Black Annealed Wire

**Quality:** ACC. EN 10218-2  
**Size:** 0,8 mm Min — 6,0 mm Max

DIAMETER (MM)	WEIGHT (KG)	TENSILE STRENGTH (N/MM <sup>2</sup> )	INSIDE DIAMETER (MM)
0,80-1,30	20-25	Max. 550	c.200; c.320
	30-60		c.320
	60-100		c.280
1,40-1,60	20-60		c.320; c.420
	60-100		c.280; c.380
1,70-2,60	25-50		c.420; c.530
	60-100		c.380; c.490
	100-180		c.460
2,70-6,50	25-50		c.530
	60-100		c.490
	100-180		c.460

### APPLICATION

Agriculture, fences, house holding, cardboard boxes manufacturing, netting and knitting, cable for tiding in constructions, barbed wire.

### PACKAGING

- Coils/spools/rosettes unpacked
- Coils/spools/rosettes packed in stretch folio



## Hard Drawn Ribbed Surface Wire

**Quality:** ACC. EN 10218-2  
**Size:** 2,15 mm Min — 6,0 mm Max

DIAMETER (MM)	WEIGHT (KG)	TENSILE STRENGTH (N/MM <sup>2</sup> )	INSIDE DIAMETER (MM)	ELONGATION (%)
2,15-6,0	Max. 2000	Max. 550	610-620	Min. 8

### APPLICATION

For constructions, concrete reinforcement, welded mesh manufacturing.

### PACKAGING

- Spools unpacked
- Spools packed in stretch folio



## Hot Dipped Galvanized Wire (Soft/Hard)

Quality: ACC. EN 10218-2  
 Size: 0,8 mm Min — 6,0 mm Max

DIAMETER (MM)	WEIGHT (KG)	TENSILE STRENGTH (N/MM <sup>2</sup> )	INSIDE DIAMETER (MM)	OUTSIDE DIAMETER (MM)
0,80-1,30	20-40	Max. 550	370-410	420-470
1,40-2,50	30-60		380-420	460-500
1,50-6,00	40-60		500-550	650-700
	60-80			
	80-120			

### APPLICATION

For general purpose, netting, knitting, agriculture, house holding.

### PACKAGING

- Coils/spools unpacked
- Coils/spools packed in stretch folio



## Hard Drawn Wire

Quality: ACC. EN 10218-2 /MATT /BRIGHT  
 Size: 0,8 mm Min — 6,0 mm

DIAMETER (MM)	WEIGHT (KG)	TENSILE STRENGTH (N/MM <sup>2</sup> )	INSIDE DIAMETER (MM)
0,80-1,30	20-25	Max. 550	c.200; c.320
	30-60		c.320
	60-100		c.280
1,40-1,60	20-60		c.320; c.420
	60-100		c.280; c.380
1,70-2,60	25-50		c.420; c.530
	60-100		c.380; c.490
	100-180		c.460
2,70-6,50	25-50		c.530
	60-100	c.490	
	100-180	c.460	

### APPLICATION

For general purpose, nails manufacturing, stapling wooden materials, galvanized wire manufacturing or other wire products.

### PACKAGING

- Coils/rosettes unpacked
- Coils/rosettes packed in stretch folio

# Thank you!

## Order & Delivery

To find out suitable delivery options and clarify amounts please don't hesitate to contact us via email or phone.



# ARMOFIB®

### OFFICE & STOCK LOCATION

Tiefenweg str. 18.,  
H-2092 Budakeszi, Hungary

### OPEN HOURS

Monday – Friday: 9 am – 5 pm  
Saturday and Sunday: Closed

### SALES DEPARTMENT

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### ADMINISTRATION DEPARTMENT

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ARMOFIB® LTD

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